

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

REC'D 30 SEP 2004

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To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/US2004/004668

International filing date (day/month/year)
17.02.2004

Priority date (day/month/year)
18.02.2003

International Patent Classification (IPC) or both national classification and IPC
H04Q7/38

Applicant
QUALCOMM, INCORPORATED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2004/004668

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2004/004668

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	7, 8, 22, 23
	No: Claims	1-6, 9-21, 24-30
Inventive step (IS)	Yes: Claims	
	No: Claims	1-30
Industrial applicability (IA)	Yes: Claims	1-30
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V.

- 1 The following documents are referred to in this communication:
D1: EP-A-0 627 827 (CSELT CENTRO STUDI LAB TELECOM ; PHILIPS
ELECTRONICS NV (NL)) 7 December 1994 (1994-12-07)
D2: US-A-6 134 218 (HOLDEN BRIAN D) 17 October 2000 (2000-10-17)

2 INDEPENDENT CLAIMS

- 2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1 and 16 is not new in the sense of Article 33(2) PCT. Regarding independent claim 1, document D1 discloses (the references in parenthesis applying to this document): " a method for determining a data rate for reverse link communication from a mobile station to a base station (prgrphs [0016]-[0017]) comprising:

determining packets of data for transmission from the mobile station for a number of communication services (prgrphs [0010], [0011], [0043] and [0017] ll. 39-40);

determining a transmission deadline of each of said packets of data; arranging the packets of data in a queue for transmission in accordance with said determined transmission deadline (prgrphs [0023] and [0032]; ll. 39-42, *it is considered implicit that packets of data are queued before transmission*)

determining a data rate for transmission of the packets of data based on the arrangement of said packets of data in said queue allowing for meeting the transmission deadline for each of said packets of data (prgrph [0023]; ll. 35-38)."

Similar objections apply to independent claim 16, which is the corresponding apparatus claim of method claim 1. Consequently, said claims are not new

- 2.2 The additional feature of claims 9 and 24 over claims 1 and 16: to arrange said packets of data in a number of queue arrangements and to determine data rates for each said queue arrangements. This is disclosed in D1 (prgrph [0038]). Consequently said claims are also not new (Articles 33(1) and 33(2) PCT).

3 DEPENDENT CLAIMS

- 3.1 Dependent claims 2-6, 10-15, 17-21 and 25-30 do not contain any features which,

in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty (Article 33(1) and (2) PCT) because their additional features are disclosed in D1 accordingly:

-claims 2-4, 11-13, 17-19 and 26-28 (prgrphs [0023] and [0032]; ll. 40-42; *the communication of rates and duration to the base station is considered implicitly disclosed as it is a necessary feature for the system to work*)

-claims 5, 14, 20 and 29 (prgrhps [0020] and [0026]; ll. 56-57)

-claims 6, 10, 15, 21, 25 and 30 (prgrphs [0038]; l. 48)

- 3.2 Dependent claims 7, 8, 22 and 23 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step (Article 33(1) and (3) PCT) for the following reasons:

The additional feature of said claims is to drop at least a packet of data of said data in said queue when a sufficient data rate can not be provided by the system. However, said feature can not be considered inventive over D1 (prgrph [0043]) because said feature is a standard ATM feature (see for example D2 (col. 9, ll. 16-59). Consequently, said claims are not inventive over D1.